Southern California Priority Corridor
Showcase Program Evaluation

Corridor-wide Commercial Vehicle Operations (CWCVO) Traveler Information System Project Evaluation Report

FINAL

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CONTENTS

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Abbreviations & Acronyms

ATIS	Advanced Traveler Information System
ATMIS	Advanced Traffic Management & Information System
ATMS	Advanced Transportation Management System
AVL	Automatic Vehicle Location
Caltrans	California Department of Transportation
CCTV	Closed-circuit Television surveillance camera
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHP	California Highway Patrol
CM	Configuration Management
CMP	Configuration Management Plan
CMS	Changeable Message Sign
CORBA	Common Object Request Broker Architecture
COTS	Commercial Off-the-Shelf
CTC	California Transportation Commission
CVO	Commercial Vehicle Operations
CW	Corridor-wide
CWATIS	Corridor-wide Advanced Traveler Information System Project
CWATMS	Corridor-wide Advanced Transportation Management System Project
CWCVO	Corridor-wide Commercial Vehicle Operations Project
CWSIP	Corridor-wide Systems Integration Project
CWSPP	Corridor-wide Strategic Planning Project
DOIT	Department of Information Technology
DRI	Caltrans Division of Research & Innovation (formerly NTR)
EAP	Evaluation Activity Plan
EP	Evaluation Plan
FHWA	Federal Highway Administration
FSR	Feasibility Study Report
FTA	Federal Transit Administration
FTE	Full-Time Equivalent (one full-time employee)
GPRA	Government Performance and Results Act
GUI	Graphical User Interface
HAZMAT	Hazardous Materials
HP	Hewlett-Packard
HQIT	Headquarters - Information Technology (division of Caltrans)
IDL	Interface Definition Language
IPR	Intellectual Property Rights
ISP	Information Service Provider
ISSC	Information Systems Service Center (division of Caltrans)
ISTEA	Intermodal Surface Transportation Efficiency Act (of 1991)
ITS	Intelligent Transportation Systems
LACDPW	Los Angeles County Department of Public Works
LADOT	City of Los Angeles Department of Transportation

LAN	Local Area Network
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MTA	Los Angeles County Metropolitan Transportation Authority
MTBF	Mean Time Between Failure
NDA	Non-Disclosure Agreement
NET	National Engineering Technology Corporation
NTCIP	National Transportation Communications for ITS Protocol
NTR	Caltrans Division of New Technology & Research (now DRI)
OCMDI	Orange County Model Deployment Initiative
OCTA	Orange County Transportation Authority
O&M	Operations and Maintenance
OS	Operating system (such as Windows™, Unix, Linux, et. al.)
OS/OW	Oversize/Overweight
PC	Personal Computer (Windows™-based)
RCTC	Riverside County Transportation Commission
RFBP	Request for Business Plans
RFI	Request for Interest
RFP	Request for Proposals
RFQ	Request for Qualifications
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWIS	Remote Weather Information System
RWS	Remote Workstation
SANBAG	San Bernardino Association of Governments
SANDAG	San Diego Association of Governments
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCPCSC	Southern California Priority Corridor Steering Committee
TEA-21	Transportation Equity Act for the 21st Century
TIC	Traveler Information Center
TMC	Transportation Management Center
TOC	Traffic/Transportation Operations Center
USDOT	United States Department of Transportation
VCTC	Ventura County Transportation Commission
VDS	Vehicle Detector Station
VMT	Vehicle Miles Traveled
VOS	Volume/Occupancy/Speed
WAN	Wide Area Network

Executive Summary

Background

As required by federal law, all Intelligent Transportation System (ITS) projects that receive federal funding must undergo an evaluation to help assess the costs and benefits of ITS. This document is one of 23 reports produced as part of the Southern California ITS Priority Corridor Showcase Program Evaluation to help planners and decision-makers at the federal, state and local levels make better-informed decisions regarding future ITS deployments. This report presents the experiences, costs, and lessons learned from Southern California's Corridor-wide Commercial Vehicle Operations (CWCVO) project.

In 1993, the U.S. Department of Transportation designated Southern California as one of four Priority Corridors in which ITS could have particular benefit. Southern California suffers from extreme traffic congestion, limited room for expanding transportation facilities, and above-average air pollution levels. The Southern California Priority Corridor is one of the most populated, traveled, and visited regions in the country, and consists of four adjoining regions:

- Los Angeles/Ventura
- Orange County
- San Diego County
- Inland Empire (San Bernardino and Riverside Counties).

The ITS Showcase Program is one of several programs that have been implemented in Southern California's Priority Corridor to help aid mobility and mitigate traffic congestion and its associated environmental impacts. The Showcase Program consists of 17 ITS projects that collectively form a corridor-wide intermodal transportation management and information network between Los Angeles, Orange County, San Diego, and the Inland Empire. Each Showcase project deploys a piece of this corridor-wide ITS network, including regional Advanced Traveler Information Systems (ATIS), regional Advanced Transportation Management Systems (ATMS), and regional and interregional communications infrastructure. Eleven of the projects are regional in nature, while the remaining six are corridor-wide. The CWCVO project is one of the six corridor-wide projects within the Southern California Priority Corridor ITS Showcase Program.

Unlike most other projects that are being evaluated as part of the Southern California ITS Priority Corridor Showcase Program, the CWCVO project does not have a federally approved workplan and most likely will not execute a contract in time for the evaluation's completion in November 2004. However, this does not mean that the project has not been a focus of attention or that it does not have important lessons to reveal. This evaluation focuses on the history of the CWCVO project, the reasons why it has not yet executed a contract, the impacts the project has had or not had, and other lessons learned.

Evaluation Findings, Conclusions, and Recommendations

The technical goal of the Showcase Program was to develop an interregional network over which transportation agencies around the Southern California Priority Corridor could exchange information and share field device control for better coordination and improved performance and public safety. According to its original February 1998 workplan, the CWCVO project would develop an Advanced Traveler Information System (ATIS) tailored to the goods movement industry. This system would provide information to dispatchers, shippers, brokers, port operators, and commercial vehicle operators regarding:

- weather and roadway conditions,
- hazardous material (HAZMAT) and oversize/overweight (OS/OW) restrictions,
- container status at ports (sea, air, and land),
- truck stop locations and facilities,
- CVO regulatory and enforcement information, and
- international border crossing delays.

The project was to be segregated into two phases. Phase I would hire a contractor to develop a deployment plan and establish a public-private partnership to develop, manage, and operate the CVO ATIS. The contractor would prepare a detailed workplan for Phase II as part of the Phase I activities. In general, though, Phase II would involve the actual demonstration, including system installation, integration, test, and initial operation. The intent was to issue a Phase I contract and then negotiate a contract amendment for Phase II activities based on the detailed workplan developed in Phase I. In the event that an amendment could not be successfully negotiated, the contract manager would issue an RFP and award a separate contract for some or all of the Phase II work.

Although a Corridor-wide project, the San Diego Association of Governments (SANDAG) was selected by the Priority Corridor to administer the contract. Caltrans, however, was to provide day-to-day project management.

During development of the RFP, the CWCVO procurement was combined with another local, non-Showcase ITS procurement called "San Diego ATIS." Whereas CWCVO would provide traveler information tailored to goods movement throughout the Priority Corridor, San Diego ATIS would provide traveler information for everyday commuters in San Diego County.

While the CWCVO portion of the project received $750,000 in federal and state funding from the Showcase Program, the San Diego ATIS portion was funded through SANDAG's Congestion Mitigation and Air Quality Program (CMAQ) at $3,000,000. In addition, since the ATIS was envisioned to be a public-private partnership, bidders were expected to propose an investment strategy that included some direct-cash and/or in-kind private investment.

The combined CWCVO Phase I/San Diego ATIS solicitation was released as a Request for Business Plans (RFBP) in March 2000. A team led by Iteris (formerly Odetics ITS) was selected, but a contract was never executed. Contract negotiations failed after 20 months due, at least in part, to the buy-out of one of Iteris' team members.

As a result of the experience, SANDAG has enacted several new policies regarding issuing contracts to form public-private partnerships:

1. Proposals must now include financial statements from the private partners to substantiate or confirm their ability to provide any required direct-cash or in-kind investment.

2. Contract negotiation periods are now limited to 60 days.

3. SANDAG contracts now contain clauses regarding performance bonds, warranties, and liquidated damages.

A new RFP for the CWCVO project is under development and due to be released by SANDAG. However, now that the Showcase Program is nearing completion, the Priority Corridor Steering Committee should consider whether it still wants to pursue the Corridor-wide CVO project and, if so, whether SANDAG is the right agency to administer it.

1 Introduction

1.1 Purpose and Scope of this Report

As required by federal law[1], all Intelligent Transportation System (ITS) projects that receive federal funding must undergo an evaluation to help assess the costs and benefits of ITS. The information provided in this report is intended to help planners and decision-makers at the federal, state and local levels make better-informed decisions regarding future ITS deployments based on the experiences of Southern California's CWCVO project.

This document is one of 23 reports produced as part of the Southern California ITS Priority Corridor Showcase Program Evaluation, and covers only the events and findings resulting from the CWCVO evaluation. The complete set of findings from the Showcase Program Evaluation are found in the following collection of documents:

Document Type/Title	Date	Document Number
17 Individual Project Evaluation Reports		
Corridor-wide ATIS Project Report	7/16/2003	65A0030/0033
Corridor-wide ATMS Project Report	10/28/2004	65A0030/0049
Corridor-wide CVO Project Report	**10/29/2004**	**65A0030/0051**
Corridor-wide Rideshare Project Report	9/9/2004	65A0030/0048
Corridor-wide Strategic Planning Project Report	10/29/2002	65A0030/0028
Fontana-Ontario ATMIS Project Report	10/15/2004	65A0030/0047
IMAJINE Project Report	3/17/2003	65A0030/0029
IMTMC Project Report	TBD	65A0030/0054
InterCAD Project Report	4/2/2003	65A0030/0030
Kernel Project Report	5/30/2003	65A0030/0031
LA ATIS Project Report	7/18/2003	65A0030/0038
Mission Valley ATMIS Project Report	10/13/2004	65A0030/0050
Mode Shift Project Report	9/7/2004	65A0030/0052
OCMDI Project Report	2/20/2004	65A0030/0040
Traffic Signal Integration Project Report	10/25/2004	65A0030/0055
Transit Mgt System Project Report (Draft)	10/19/2004	65A0030/0053
TravelTIP Project Report	6/3/2003	65A0030/0036
5 Cross-Cutting Evaluation Reports		
System Performance Cross-Cutting Report	TBD	65A0030/0056
Costs Cross-Cutting Report	TBD	65A0030/0057
Institutional Issues Cross-Cutting Report	TBD	65A0030/0058
Information Management Cross-Cutting Report	TBD	65A0030/0059
Transportation System Impacts Cross-Cutting Report	TBD	65A0030/0060
Final Summary Evaluation Report		
Showcase Program Evaluation Summary Report	TBD	65A0030/0061

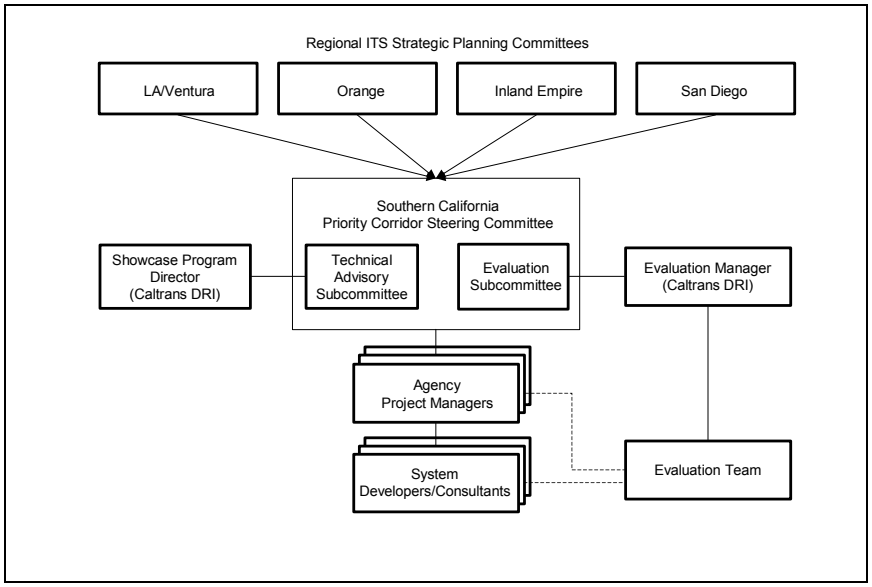
"TBD" indicates a future deliverable that is not yet available.

1.2 Evaluation Design and Approach

The findings outlined in this report are based on over five years of direct observations at project meetings, reviews of released project documents and agency memos, as well as formal and informal interviews and discussions with project partners.

The evaluation is responsive to the needs and suggestions of the Priority Corridor's Evaluation Subcommittee, which reports to the Priority Corridor's Steering Committee. As shown in Exhibit 1, both committees are comprised of stakeholders from the federal, state, and local levels.

Exhibit 1 – Management Structure and Organization of the Showcase Program



The Steering Committee's member agencies reflect wide representation from the region in terms of federal and state highway agencies, public safety, cities and counties, transit, air quality and regional planning entities, including:

- California Highway Patrol (CHP)
- Caltrans, Division of Traffic Operations (headquarters)*
- Caltrans, District 7*
- Caltrans, District 8*
- Caltrans, District 11*
- Caltrans, District 12
- City of Irvine*
- City of Los Angeles Department of Transportation (LADOT)
- City of San Diego
- Federal Highway Administration (FHWA)*
- Federal Transit Administration (FTA)

- Los Angeles County Metropolitan Transportation Authority (MTA)
- Orange County Transportation Authority (OCTA)
- Riverside County Transportation Commission (RCTC)
- San Bernardino Association of Governments (SANBAG)
- San Diego Association of Governments (SANDAG)
- South Coast Air Quality Management District (SCAQMD)
- Southern California Association of Governments (SCAG).

* Indicates an Evaluation Subcommittee member

The Showcase Program's Evaluation Design is based on a set of evaluation Goals and supporting Objectives and Measures that were developed by the Evaluation Team in partnership with federal, state and local stakeholders, and documented in the "Showcase Program Evaluation Approach" in 1998. Each individual Showcase project is evaluated based on an applicable subset of these Goals, Objectives, and Measures in order to help ensure that summary evaluation results can be aggregated from across the multiple Showcase project evaluations. The Showcase Program's five evaluation Goals include:

- Evaluate System Performance
- Evaluate Costs
- Evaluate Institutional Issues and Impacts
- Evaluate the Use and Management of Transportation/Traveler Information
- Evaluate Transportation System Impacts.

As the CWCVO workplan evolved, project-specific refinements to the evaluation design were documented in a high-level Evaluation Plan (EP). In general, the EP describes the project and/or system under evaluation, and lays the foundation for further evaluation activities by developing consensus among the Evaluation Subcommittee and project partners as to which of Showcase's evaluation Goals, Objectives, and Measures best apply to the project.

Unlike Showcase's other project evaluations – and because of the limited scope of the CWCVO evaluation – an Evaluation Activity Plan (EAP) to plan detailed data collection efforts was not developed. The information presented in this report is based on personal observations and informal interviews with project participants.

1.3 Organization of this Report

The CWCVO Evaluation Report provides a background description of the Southern California Priority Corridor and the transportation challenges it faces. This is followed by descriptions of the Showcase Program and then, more specifically, the CWCVO project.

In general, each Showcase evaluation report is subdivided and ordered into the five topic areas (Evaluation Goals) described below:

System Performance — For CWCVO, this section will cover the project's history by describing a chronology of important events, milestones, and decisions.

Cost — This section provides important benchmark information regarding the project budget and funding sources.

Institutional Impacts — provides important information regarding the administrative, procedural and legal impacts resulting from the project. Such impacts include changes and limitations of agency-wide policies, procedures and guidelines.

Since CWCVO has not developed, modified, installed, or integrated any physical systems, the Evaluation Subcommittee and the project stakeholders concurred that an evaluation of Transportation & Traveler Information Management (Evaluation Goal 4) and Transportation System Impacts (Evaluation Goal 5) could not be conducted at this time.

The report concludes with a summary, final remarks and recommendations for next steps.

1.4 Privacy Considerations

Some of the information acquired in the interview and discussion process could be considered sensitive and has been characterized in this report without attribution. The Evaluation Team has taken precautions to safeguard responses and maintain their confidentiality. Wherever possible, interview responses have been aggregated during analysis such that individual responses have become part of a larger aggregate response. The names of individuals and directly attributable quotes have not been used in this document unless the person has reviewed and expressly consented to its use.

1.5 Constraints & Assumptions

The CWCVO evaluation is subject to the following constraints and assumptions:

- Although Priority Corridor funds were set aside for the CWCVO project, a contract was never executed.

1.6 Project Background

1.6.1 The Southern California Priority Corridor

In 1993, the U.S. Department of Transportation designated Southern California as one of four Priority Corridors in which Intelligent Transportation Systems (ITS) could have particular benefit. The Southern California Priority Corridor, illustrated in Exhibit 2, is one of the most populated, traveled, and visited regions in the country. Over 20 million people – roughly two-thirds of the state's population – reside in or around the Southern California Priority Corridor. It suffers from extreme traffic congestion, limited room for expanding transportation facilities, and above-average air pollution levels.

The Southern California Priority Corridor consists of four distinct regions that correspond with the four Southern California Caltrans districts:

- Los Angeles/Ventura (Caltrans District 7)
- Orange County (Caltrans District 12)
- San Diego (Caltrans District 11)
- Inland Empire (Caltrans District 8)

Exhibit 2 – The Southern California Priority Corridor and Vicinity

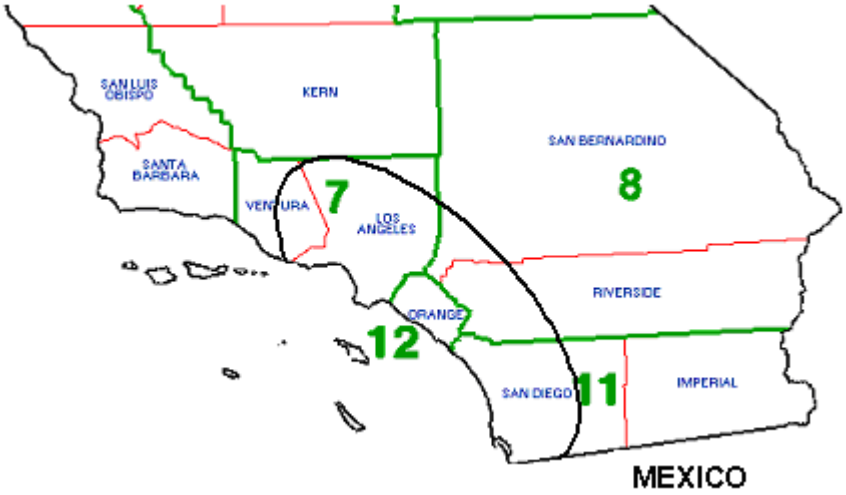


Exhibit 3 – Population and Number of Registered Vehicles by County

County	Population[2] (as of 1/1/2003)	Registered Vehicles[3]* (as of 12/31/2002)	Caltrans District
Los Angeles	10 million	6.7 million	7
Orange	3 million	2.2 million	12
San Diego	3 million	2.3 million	11
San Bernardino	1.8 million	1.3 million	8
Riverside	1.7 million	1.2 million	8
Ventura	0.8 million	0.7 million	7
Imperial	0.15 million	0.1 million	11
Total	**20.5 million**	**14.5 million**	

*Includes autos, trucks, and motorcycles. Trailers not included.

1.6.2 The Southern California Priority Corridor's ITS Showcase Program

The ITS Showcase Program is one of several programs that have been implemented in Southern California's Priority Corridor to help aid mobility and mitigate traffic congestion and its associated environmental impacts.

The Southern California ITS Showcase Program consists of 17 individual ITS projects that collectively form a corridor-wide intermodal transportation management and information network between Los Angeles County, Orange County, San Diego County, and the Inland Empire. Eleven of the projects are regional in nature, while the remaining six are corridor-wide in scope. The CWCVO project is one of the six corridor-wide projects.

The 17 Showcase projects are listed by region in Exhibit 4. Eight of the projects were fast-tracked and designated "Early Start" projects because of their importance as base infrastructure and potential to act as role models for the rest of the Showcase Program.

Exhibit 4 – The 17 Showcase Projects and their Status as of August 2004

Project	RFP Issued	Contractor Selected	Contract Executed	Project Underway	Project Complete
Corridor-wide					
Scoping & High Level Design (Kernel)*	✓	✓	✓	✓	✓
Strategic Planning/Systems Integration	✓	✓	✓	✓	✓
CVO🗎	**(1)**				
ATIS	✓	✓	✓	✓	✓
ATMS🗎					
Rideshare	✓	✓	✓	✓	✓
Los Angeles Region					
IMAJINE*	✓	✓	✓	✓	✓
Mode Shift*	✓	✓	✓	✓	✓
LA ATIS	✓	✓	✓	✓	✓
Inland Empire Region					
Fontana-Ontario ATMIS	✓	✓	✓	✓	✓
Orange County Region					
TravelTIP*	✓	✓	✓	✓	✓
OCMDI	✓	✓	✓	✓	✓
San Diego Region					
InterCAD*	✓	✓	✓	✓	✓
Mission Valley ATMIS*	✓	✓	✓	✓	✓
IMTMS/C (ATMSi)*	✓	✓	✓	✓	
Traffic Signal Integration (RAMS)	✓	✓	✓	✓	
Transit Management System*	✓	✓	✓	✓	

* Indicates an "Early Start" project.

🗎 CWCVO and CWATMS do not yet have approved workplans.

(1) The CWCVO project issued an RFP and selected a contractor in 2001; however, contract negotiations failed in March 2002. A second RFP has not been released.

2 Project/System Technical Description

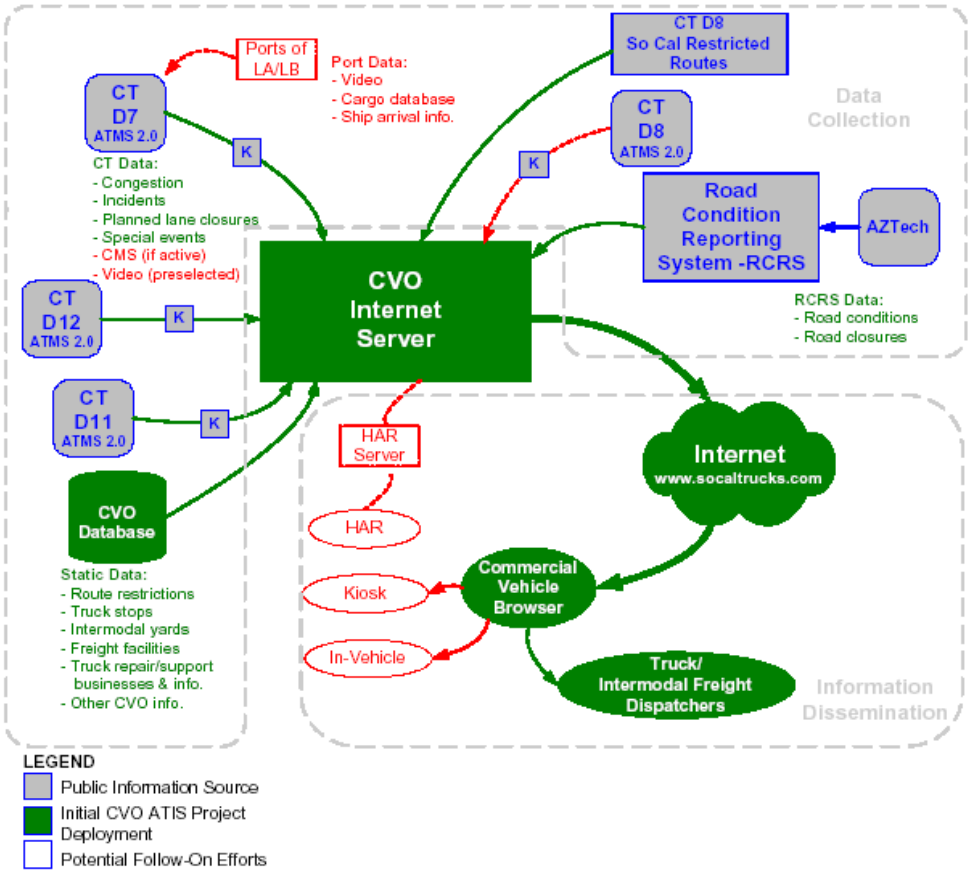
The vision of the Southern California ITS Priority Corridor Steering Committee is to significantly improve the safety, efficiency, and environmental impacts of the region's intermodal transportation system through the application of advanced transportation technologies and integrated management systems. To that end, the Showcase Program aimed to create a corridor-wide intermodal transportation management and information network (the Showcase Network) between Los Angeles County, Orange County, San Diego County, and the Inland Empire.

As part of the Showcase Program, the CWCVO project would develop an Advanced Traveler Information System (ATIS) tailored to the goods movement industry. This system would provide information to dispatchers, shippers, brokers, port operators, and commercial vehicle operators regarding:

- weather and roadway conditions in the Priority Corridor,
- hazardous material (HAZMAT) and oversize/overweight (OS/OW) restrictions,
- container status at ports (sea, air, and land),
- truck stop locations and facilities,
- CVO regulatory and enforcement information, and
- international border crossing delays.

Exhibit 5 shows the conceptual design for the CWCVO ATIS, as provided in an attachment to its March 2000 RFBP. A central server would act as the collection and distribution point for data collected from the public- and private sector. Potential data sources include the four Caltrans TMCs in the Priority Corridor; Phoenix, Arizona's Road Conditions Reporting System (RCRS); and possibly the seaports of Los Angeles and Long Beach. At a minimum, the traveler information would be provided via the Internet, though Highway Advisory Radio (HAR) and truck stop kiosks might also be utilized at some point.

Exhibit 5 – ATIS for CVO System Concept



3 System Performance Evaluation

3.1 The Project/System Development Process and Timeline

The CWCVO project has been years in the making.

The CWCVO project is one of six "corridor-wide" Showcase projects. The six projects and their respective contract administrators are shown below:

Project	Agency
Corridor-wide Advanced Traveler Information System (CWATIS)	Caltrans DRI
Corridor-wide Advanced Transportation Management System (CWATMS)	Caltrans DRI
Corridor-wide Commercial Vehicle Operation (CWCVO)	SANDAG
Corridor-wide Systems Integration Project (CWSIP)(later renamed CWSPP)	Caltrans DRI
Corridor-wide Rideshare	SCAG
Scoping & Design (Kernel)	SANDAG

The original CWCVO workplan was submitted to the Federal Highway Administration (FHWA) in December 1996 as part of the Southern California Priority Corridor's federal funding request. The workplan proposed to create a public-private partnership to develop and manage a corridor-wide traveler information system tailored to the goods movement industry.

The direction of the CWCVO workplan was discussed and managed by the Priority Corridor's CVO Subcommittee, which included representatives from both public and private entities. This group tracked emerging trends in the goods movement industry, and helped plan the appropriate timing for initiating the project.

In October 1999 (and possibly earlier), the CVO Subcommittee briefed the Priority Corridor Steering Committee on its intent to combine the CWCVO effort with San Diego's proposed "San Diego Regional ATIS" project. Whereas CWCVO would provide traveler information tailored to goods movement throughout the Priority Corridor, San Diego ATIS would provide traveler information for everyday commuters in San Diego County.

While the CWCVO portion of the project receives $750,000 in federal and state funding from the Showcase Program, the San Diego ATIS portion is funded through SANDAG's Congestion Mitigation and Air Quality Program (CMAQ) at $3,000,000. In addition, since the ATIS was envisioned to be a public-private partnership, bidders were expected to propose an investment strategy including some direct-cash and/or in-kind private investment.

At the request of FHWA, the workplans and budget tracking for the two efforts were to be kept separate, but similar tasks under each effort should be done jointly in order to save time and be more efficient.

The combined CWCVO Phase I/San Diego ATIS solicitation was prepared as a Request for Business Plans (RFBP) and submitted for review to the Priority Corridor's Technical Advisory Subcommittee (TAS) on 6 January 2000. The RFBP was officially released in March 2000, and Business Plans were received by SANDAG on 3 May 2000.

The Business Plans were evaluated and SANDAG entered contract negotiations with a team led by Iteris on 23 June 2000. The contract negotiations lasted roughly 20 months and ultimately failed in March 2002. This is discussed further in Section 5.1.

SANDAG almost immediately began making plans to select a new private partner. This time, SANDAG planned to utilize a two-stage procurement. In step 1, the agency would issue a Request for Interest (RFI) to obtain industry feedback, then, in step 2, the agency would issue a Request for Qualifications (RFQ) to select the most qualified partner.

On 30 June 2003 – the end of the State's fiscal year – Caltrans withdrew its unspent $150,000 contribution to the CWCVO project.

As of March 2004, Caltrans DRI still held the $600K of federal funding allocated for CWCVO project. Although the money is still available to the Priority Corridor, local agencies will be responsible for providing the required 20% matching funds.

3.2 Impact of Showcase Integration on Project Deployment and System Performance

The CWCVO is one of 17 projects that make up the Showcase Program and Network. As such, many interdependencies developed between the projects as plans were made for eventual regional and corridor-wide integration. This section describes how these interdependencies may have impacted the CWCVO project and other Showcase projects.

3.2.1 Impact of the CWCVO Project on other Showcase Projects

The delay in executing a CWCVO contract has not hindered any other Showcase projects.

At this point, the evaluation can only speculate on the impacts caused by not executing a CWCVO contract sooner. As envisioned, CWCVO would have tailored data from other systems to provide traveler information to end-users in the goods movement industry. As such, CWCVO would be more of a data consumer – gathering data from the Showcase Network for redistribution – and less of a data supplier.

Since CWCVO is not intended to build any of Showcase's core infrastructure, its impact on other Showcase projects is minimal.

3.2.2 Impact of other Showcase Projects on CWCVO

CWATIS reinforces the decision to utilize a public-private partnership for CWCVO.

Although CWCVO had always planned to utilize a public-private partnership for providing traveler information, a Gap Analysis performed under the CWATIS project reinforces this decision. The Gap Analysis, dated January 2001, found that, "The trend in ATIS is towards shifting more and more of the burden to the private sector, when appropriate." Reasons cited for this shift include[4]:

1. The private sector is already providing much ATIS information on its own, and hence has demonstrated its willingness and ability to do so.
2. Shifting some of the burden (where appropriate) to the private sector frees up tax dollars to spend on other transportation needs. This results in more services being provided to the public for the same budget.
3. In many cases, the private sector already has expertise and resources (e.g. mapping, graphics displays appropriate to internet/kiosks, web sites which provide the public with a wide assortment of information), which it can capitalize to improve cost effectiveness.
4. Often the private sector can react more quickly to rapidly evolving technology and market demands than the public sector can.

4 Cost Evaluation

The cost evaluation draws information from documented costs and personal interviews. Budget information was taken directly from the project's contract and amendments, while operations and maintenance costs were obtained from discussions with agency personnel. Informal interviews were conducted to verify information and fill in any "holes" that were discovered during analysis.

4.1 Constraints & Assumptions

There is one primary consideration for the Cost Evaluation:

- Although Priority Corridor funds were set aside for the CWCVO project, a contract was never executed.

4.2 Project Budget

This section addresses the funds set aside for the CWCVO project in anticipation of executing a contract.

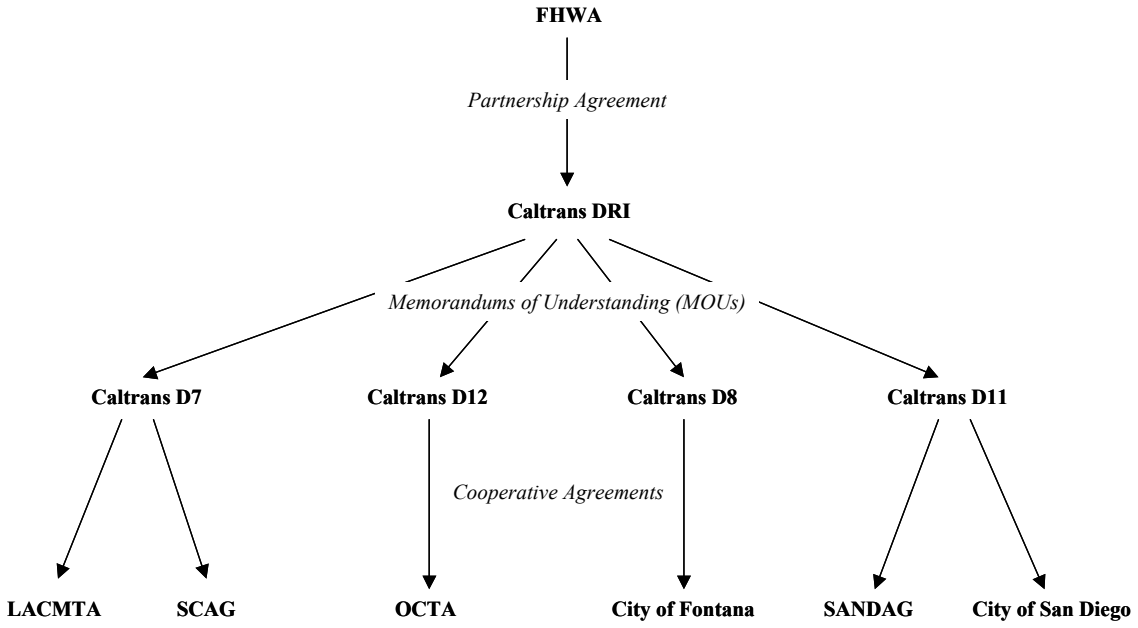
4.2.1 Project Budget

$750,000 – including both federal and state money – was initially set aside for the CWCVO project. Today, only the $600,000 federal contribution remains.

A total of $750,000 in federal ($600,000) and state ($150,000) funds were set aside for the CWCVO project in compliance with federal ITS guidelines to split project costs 80% federal and 20% state and/or local. However, at the end of the State's fiscal year on 30 June 2003, Caltrans withdrew its $150,000 share. In the event that the CWCVO project does move forward again, local agencies such as SANDAG will be responsible for identifying and providing the required 20% local match.

The $600,000 in federal money is currently held by Caltrans DRI. If SANDAG does execute a CWCVO contract, the federal money will be transferred to Caltrans District 11 (San Diego Region) through a Memorandum of Understanding (MOU), then made available to SANDAG through a Cooperative Agreement, as shown in Exhibit 6.

Exhibit 6 – Flow Diagram of Showcase Program Contracts and Funding



5 Institutional Impacts Evaluation

5.1 Impacts to the Competitive Environment

The Iteris-led team selected during the year 2000 CWCVO procurement included SmartRoute Systems and US Wireless. The other two short-listed teams included Metro Traffic and Mobility Technologies (formerly Traffic.com). After the Iteris/SmartRoute/US Wireless team had been selected – and while contract negotiations were underway – Metro Traffic bought-out SmartRoute Systems. This buy-out had several repercussions, including:

1. The CWCVO contract required some form of direct-cash or in-kind investment from the private partner. The loss of SmartRoute impacted the amount of money that the Iteris team could raise and invest in the project.

2. As the new owner of SmartRoute, Metro Traffic was anxious to "close the books" by seeing the contract negotiations come to an end. SANDAG management enacted a 30-day deadline for staff to finalize the contract, which eventually led to the termination of negotiations.

5.2 Impacts to Local Planning Processes, Policy Development, and the Mainstreaming of ITS

As a result of the year 2000 CWCVO procurement, SANDAG has enacted several new policies when issuing contracts to form public-private partnerships:

4. Proposals must now include financial statements from the private partners to substantiate or confirm their ability to provide any required direct-cash or in-kind investment.

5. Contract negotiation periods are now limited to 60 days.

6. SANDAG contracts now contain clauses regarding performance bonds, warranties, and liquidated damages.

Conclusions and Recommendations

Although no contract has been awarded for the CWCVO project, this report provides background into the events and planning efforts that have affected the project to-date.

As the contract administrator, SANDAG had planned to form a public-private partnership to manage the traveler information business proposed in the CWCVO workplan. A Request for Business Plans (RFBP) was issued in March 2000, but contract negotiations with the selected team ultimately failed in March 2002. As a result, SANDAG has enacted several new policies regarding issuing contracts to form public-private partnerships:

1. Proposals must now include financial statements from the private partners to substantiate or confirm their ability to provide any required direct-cash or in-kind investment.

2. Contract negotiation periods are now limited to 60 days.

3. SANDAG contracts now contain clauses regarding performance bonds, warranties, and liquidated damages.

A new RFP for the CWCVO project is under development and due to be released by SANDAG. However, now that the Showcase Program is nearing completion, the Priority Corridor Steering Committee should consider whether it still wants to pursue the Corridor-wide CVO project and, if so, whether SANDAG is the right agency to administer it.

Endnotes/References

[1] ISTEA requires that "operational tests utilizing federal funds have a written evaluation of the Intelligent Vehicle Highway Systems technologies investigated and the results of the investigation." Although Showcase is not officially an operational test, it deploys and demonstrates ITS services, functions, and technologies under "real world" conditions, similar to an operational test.

[2] California Statistical Abstract, Table B-4. California Department of Finance, Sacramento, CA. December 2003.

[3] California Statistical Abstract, Table J-4. California Department of Finance, Sacramento, CA. December 2003.

[4] Gap Analysis Report, TransCore, January 2001, p 6-5.